Patent Claims

1. A multifunction antenna having the following features:

- the antenna device comprises at least four antennas (A, B, C, D),
- one antenna (C) is suitable for receiving satellite signals, in particular digital satellite signals,
- one antenna (A) is provided for receiving terrestrial signals, in particular terrestrially emitted radial programs,
- one antenna (D) is provided for the mobile radio field and
- one antenna is provided for determining the geoposition,

characterized by the following further features

- the antenna (A) for receiving terrestrial signals is provided as a separate antenna in addition to the antenna (C) for receiving satellite signals,
- the at least four antennas (A, B, C, D) are arranged in a prescribed sequence on a chassis (1), specifically the antenna (A) for receiving the terrestrially emitted signals is arranged at one end, followed by the antenna (B) for determining the geoposition, followed by the antenna (C) for receiving satellite signals, and followed by the antenna (D) for the mobile radio field,
- the center-to-center distance between the terrestrial antenna (A) and the adjacent antenna (B) for geopositioning is smaller than the center-to-center distance between the antenna (B) and the adjacent antenna (C) for receiving satellite signals,
- the center-to-center distance between the antenna (B) for geopositioning and the adjacent satellite antenna (A) is smaller than the center-to-center distance between the antenna (C) and the antenna (D) for the mobile radio field, and

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- the antenna (A) for receiving the terrestrially emitted signals is arranged in the leading region (3) of the chassis (1) such that the antenna (D), seated furthest therefrom, for the mobile radio field is arranged in the trailing region (3) on the chassis (1).

2. The multifunction antenna as claimed in claim 1, characterized in that the three adjacent antennas (A), (B), (C) are arranged on the longitudinal region of the chassis (1), which amounts to less than 60% of the overall length of the chassis (1).

3. The multifunction antenna as claimed in claim 1 or 2, characterized in that the antenna (C) for receiving the satellite signals consists of a patch antenna.

4. The multifunction antenna as claimed in one of claims 1 to 3, characterized in that the antenna (B) for carrying out geopositioning consists of a patch antenna.

5. The multifunction antenna as claimed in one of claims 1 to 4, characterized in that the antenna (A) for receiving terrestrial signals consists of at least a monopole, preferably in the form of a rod.

6. The multifunction antenna as claimed in one of claims 1 to 5, characterized in that the antenna (D) for the mobile radio field is suitable for receiving at least in one mobile radio frequency band, preferably in at least two and preferably in at least three frequency bands.

7. The multifunction antenna as claimed in claim 6, characterized in that the antenna (D) for the mobile radio field consists of electrically conducting surfaces that are formed on a substrate, in particular a printed circuit board.

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8. The multifunction antenna as claimed in one of claims 1 to 7, characterized in that all the antennas (A, B, C, D) are arranged on the chassis (1) beneath a fin-like housing cover (9).

9. The multifunction antenna as claimed in one of claims 1 to 8, characterized in that in plan view the chassis is fashioned like a boat or surfboard or at least similarly.